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September 7, 2001

Mr. Bruce Brody-Heine
Voluntary Cleanup and Portland Harbor Section
Oregon Department of Environmental Quality
2020 SW Fourth Ave, Suite 400
Portland, OR 97201-4987

Subject: Response to DEQ Comments on Pre-Remedial Investigation Work Plan Addendum
Oregon Steel Mills, Portland, Oregon
ECSI Site 141
Project No. 8601526.001 0301

Dear Mr. Brody-Heine:

On behalf of Oregon Steel Mills (OSM), this letter provides OSM's response to comments provided by the Oregon Department of Environmental Quality (DEQ) on OSM's pre-remedial investigation work plan addendum. The proposed work plan was submitted to DEQ in a letter dated August 9, 2001, and DEQ's comments were received in a letter dated August 17, 2001. The responses incorporated in this letter are based on discussions between OSM, DEQ, and Exponent during our meeting on August 28, 2001, as well as DEQ's follow-up letter dated August 30, 2001.

DEQ's comments from the August 17, 2001 letter are provided, in italics, followed by OSM's response.

General Comments

A. *Analytical Detection Limits. As a reminder, please confirm that the laboratory analytical detection limits for the proposed analyses are appropriate for evaluating the resulting data against the human and/or ecological risk-based screening values.*

OSM notes this reminder.

Specific Comments

Task 1. Soil Sampling in the Vicinity of the Former Transformer Storage Area

1. *Depth of the Soil Samples. To clarify the rationale for proposed soil sample depths (based upon telephone conversation with Exponent) soil samples will be collected from either obviously stained soil, soil present immediately below any obvious previous excavation fill*

material, if present, or if no fill is observed, from 4 to 5 feet below ground surface (presumed to be below any previous excavation work in this area).

OSM agrees with this clarification.

Task 2. Groundwater Sampling Downgradient from the Fueling Area

2. *Based upon the information presented in the work plan, the proposed sampling locations and analytical methods are acceptable as a screening step to evaluate groundwater conditions in this area. However, the volatile organic compounds list should be expanded to include the other volatile constituents found in gasoline. The expanded volatile compounds in gasoline are identified in Appendix A of DEQ's September 1999 Guidance document, "Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites (RBDM)," and can be captured by running EPA Method 8260.*

   The use of TPH analysis as a screening tool is acceptable for the delineation of a documented release, however additional analyses may be needed to complete the assessment of potential risks posed by the release. For use as a screening tool the TPH detection limit is required to be equal to, or less than 0.5 milligrams per liter (mg/L).

   Please note that due to the uncertainties or lack of data (such as recent groundwater well sampling data, recent flow direction data, conceptual site groundwater flow model, and exact TPH release locations (which should be a component of the soon to be completed Pre- RI/Preliminary Assessment document), it is unclear if this proposed work is adequate to define the "presence or absence" of petroleum products in groundwater in this area.

As discussed in the Pre-RI work plan addendum, the purpose of this task is not to assess the potential risks of the known gasoline underground storage tank (UST) release in the fueling area. OSM has an ongoing monitoring program for risk assessment related to this incident and is pursuing its closure. As discussed in the meeting August 28, 2001, OSM has five years worth of groundwater data from four monitoring wells surrounding this single known release, including recent data that address the expanded list of volatile compounds to which DEQ has referred.

The purpose of Task 2 of the Pre-RI work plan addendum is to differentiate groundwater potentially affected by documented and potentially undocumented petroleum releases in the fueling area from groundwater potentially affected by the "oil sump" and/or other petroleum releases located further downgradient, closer to the Willamette River. The locations of stations B-12, B-13, and B-14 have been selected to sample a representative cross-section of groundwater downgradient of the entire fueling area. Because the goal is to establish the presence or absence of petroleum products in the groundwater, and the only petroleum products stored or handled (currently or historically) in this area are gasoline and diesel, the proposed analyte list is adequate to accomplish this goal. Groundwater samples from these three stations

will be analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 602 and TPH by Method NWTPH-Dx.

Task 3. Soil Sampling in the Footprint of the Former "Paint Waste Ponds" Located at Surface Processing

3. *Depth of the Soil Samples. To clarify the rationale for the proposed soil sample depths (based upon telephone conversation with Exponent), samples will be collected from paint-waste impacted soil. Based upon observation during shallow excavations in this area, obvious paint waste staining is present within the top 5 feet.*

OSM agrees with this clarification.

4. *Analyte List. Include cadmium and manganese to the metals analyte list.*

After reviewing the literature provided by DEQ concerning potential constituents of paint, OSM agrees that cadmium and manganese should be added to the metals analyte list for soil samples from stations B-15 and B-16. Appropriate background/screening values for metal analytes will be outlined in a forthcoming letter, as discussed below in OSM's response to comments for Task 5.

Task 4. Sediment Sampling from the Catch Basins Associated With Outfalls 001 and 003.

5. *Based upon the stated objective for Task 4 the proposed sampling locations and analytical method are acceptable. A positive detection of polychlorinated biphenyls (PCBs) in the catch basin will assist with tracing a possible upland source of PCBs detected in the outfall sediment samples. However, a non-detection does not necessarily imply that PCB detections in the sediment sample are not potentially associated with historical OSM upland source(s).*

OSM agrees that this task is designed to investigate current potential upland sources of PCBs that may be transported to the Willamette River sediments. This task does not address potential historical sources.

6. *Please clarify in the data report text why a PCBs concentration of 1.0 milligrams per kilogram (mg/kg) is used as the screening cut off for additional investigations. The current freshwater sediment PCBs risk-based screening value is 0.034 mg/kg (NOAA's Threshold Effects Levels (TELs)).*

As discussed during our meeting August 28, 2001, a PCB concentration of 0.034 mg/kg is below the method detection limit of approximately 0.10 to 0.20 mg/kg for individual Aroclors®. This detection limit may (rarely) be even higher for samples that have interference effects or require dilution. As a result, 0.034 mg/kg is an unachievable screening value. Based on mutual agreement between OSM and DEQ, the detection limit will be used as a screening value to

determine whether additional investigation of the storm drain system will be required upgradient from any station(s) with elevated PCB concentrations.

Task 5. Sediment Sampling from the Catch Basins Adjacent to the OSM Scrap Yard.

7. *Analyte List. The analyte list is insufficient to meet the stated goal, to investigate the potential for TPH and metals to be transported from the OSM scrap yard to the Willamette River. Due to the nature of the operations at the facility, the metal analyte list needs to be expanded for this initial screening stage for sediments from the scrap yard storm water run-off. Attached is a table comparing metals analyzed in the electric arc furnace (EAF) Risk Assessment (RA) document (February 1998), the sediment sampling and scrap yard sampling events. DEQ requests that OSM broaden the analytical list for sediment samples SD-4 and SD-5 to include eight additional metals.*

OSM agrees to expand the analyte list for sediment samples collected from stations SD-3 and SD-4 (the two stations associated with Task 5), as well as station SD-5 (the single station associated with Task 6 discussed below) to include arsenic, cadmium, cobalt, mercury, silver, and vanadium. For the reasons summarized in DEQ's August 30, 2001 letter, aluminum and antimony have been eliminated as chemicals of interest for this site.

DEQ's August 30, 2001 letter also contains information regarding local and regional background metal concentrations. After reviewing this information, OSM will submit under separate cover, a letter proposing site-specific background/screening values for all metal analytes for DEQ's approval.

In addition, the use of TPH analysis as a screening tool is acceptable if the TPH detection limit is at, or less than, 0.5 mg/L.

The NWTPH-Dx detection limit is lower than 0.5 mg/L for all chemicals analyzed by the method.

Task 6. Sediment Sampling from the Catch Basin Adjacent to the Mosely Shear

8. *Please clarify, in the addendum data summary report, what the "local groundwater sump' refers to. Is it a low area where storm water run–off collects after a rain, or is this a man made structure that requires a permit?*

As discussed during our meeting on August 28, 2001, and observed during the ensuing site visit, the "local groundwater sump" is a man-made structure that does not require a permit.

9. *Analyte List. The initial sentence for this task states the catch basin proposed for sampling collects run-off from both the surface processing and the Mosely Shear areas. Based upon the type of the operations occurring at the Mosely Shear (metal cutting/shearing), the proposed metal analyte list is insufficient to investigate potential for metals to be transported via the storm drain system. For this screening stage of the site investigation,*

broaden the metal analyte list at this sediment location to include metals identified for Task 5, (presented in the attached Table). The remaining suggested analyte list appears appropriate for this storm water sediment sample location.

Because scrap metal is handled in the Mosely Shear area, OSM agrees with DEQ's recommendation that the metals analyte list for sediments collected from the catch basin adjacent to Mosely Shear should be the same as the metals analyte list for catch basins adjacent to the scrap yard. Appropriate background/screening values for metal analytes will be outlined in a forthcoming letter, as discussed below in OSM's response to comments for Task 5.

To minimize further delay in completion of these Pre-RI addendum field activities, OSM has tentatively scheduled the field work for September 10 through 14, 2001, pending DEQ's approval.

If you have any questions, please feel free to contact me at (503) 636-4338.

Sincerely,

David G. Livermore, R. G.
Senior Managing Scientist

cc: Joan Snyder, Stoel Rives
Drew Gilpin, Oregon Steel Mills
Laura McWilliams, Exponent